

REMARKS

Claim 1 has been amended in that former claim 7, “that the tower (3) is provided with tension rod(s) (61) and outrigger(s) (63)” and a part of the disclosure on page 4, line 23-29 in the original description (PCT) have been included in the claim. Furthermore, claim 1 retains the features that the wind power plant is a floating plant, that the machine house is non-rotationally connected to the tower and that the tower is rotatable about a tower rotational axis.

The other features of the former claim 1 have been removed from claim 1 to form new dependent claims 11, 12 and 13. The reason for removing these features from claim 1 is that they are non-essential for the invention as it is now defined in claim 1, and they would therefore act as unnecessary limitations in the scope of the claimed invention. Former claim 7 is now part of claim 1 and it has therefore been cancelled.

The examiner has cited two publications, US 3,766,582 (Lloyd et al) and US 2003/0151260 (Siegfriedsen).

Lloyd et al. discloses a buoyant tower serving to support equipment for the production of hydrocarbons where the tower is articulately connected to the seabed by the use of a pivot assembly. Furthermore, an auxiliary pivot assembly is also provided comprising a spherical bearing surface supported by a base and spherical skirt attached near the lower end of the tower where the spherical bearing surface and the spherical skirt mated and slidably engage each other, see col. 2, line 43-50. There is also provided a pair of torque pins mounted on the spherical bearing such that they engage with a pair of bearing sleeves provided in the spherical skirt. According to the description the torque pins and the bearing sleeves are an important aspect of the invention in that they prevent the tower (and any conductor pipes) from rotating with respect to the base, see col. 4, line 9-27. The tower is therefore not rotatable about a tower rotational axis when the tower is in operation.

Furthermore, the publication does not disclose means for reducing bending stresses in the tower. A tower with an increased bending stiffness as claimed in the amended claim 1 of the present application, will result in that the bending stresses and subsequently fatigue load and extreme loads on the entire floating structure are reduced, making possible a design of a floating tower with less use of material, i.e. a more light weight tower.

Siegfriedsen discloses a wind power plant with a tower which is mounted to a foundation in the seabed. As with Lloyd et al. the publication does not disclose means for reducing the bending stresses in the tower of the wind power plant. Furthermore there are no indications in the description that the machine house is non-rotationally connected to the tower. It is in fact highly unlikely that this wind power plant would be designed this way since the tower is fixed in the seabed and there are no indications in the description or on the figures that there is provided means such that the tower is rotatable about a tower rotational axis. The turbine rotor must be positioned against the wind and when the wind direction changes at least the turbine rotor and the machine house must also be turned correspondingly. Since there is no indication that the tower is rotatable about a tower rotational axis, the machine house must be rotatable relative to the tower.

Neither the problem nor a solution as defined in the amended independent claim is mentioned in the cited publications. Likewise, the figures in the cited publications do not in any way suggest that the tower be provided with a structure for absorbing bending stresses in the tower. We therefore believe that the claimed invention as it is now defined in claim 1, is non-obvious above the cited publications.

Regarding the claim objections, the terms “articulatedly” and “the upper” have been corrected to “articulately” and “an upper” (the terms are now found in claims 3 and 9 respectively).

Regarding the claim rejections – 35 USC § 112, sufficient antecedent basis is now provided for the limitation “the bearing house” in claim 5. Similarly, claim 6 refers to claim 5 and thereby provide sufficient antecedent basis for the limitation “the communicating annular spaces” and claim 9 refers to claim 4 and thereby provide sufficient antecedent basis for the limitation “the joint and the tension leg”.

Finally, the introduction of the description has been amended to account for the amendment of the independent claim.

With this we believe that the response meets all the objections raised by the examiner, thereby leaving the application in allowable form.